LENOX

SAWS *and* TOOLS

"The Blades in the Plaid Box"

CATALOG No. 48

AMERICAN SAW & MFG. COMPANY
Manufacturers
Springfield 1, Mass.

"LENOX"

Index

HACK SAW BLADES

BAND SAW BLADES

TOOLS

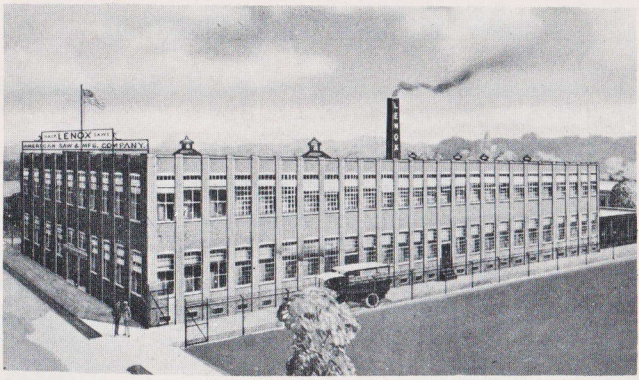
"THE BLADES IN THE PLAID BOX"

Form 101C

Printed in U. S. A.

"LENOX"

Home of Lenox

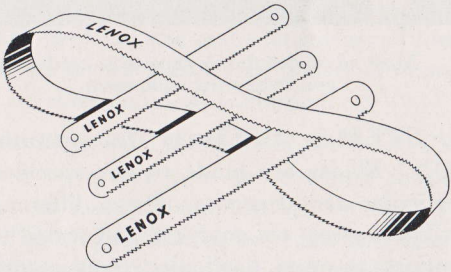


Announcement

THE House of LENOX again offers to the trade their informative catalog of concise data, designed to be of aid to the novice as well as to the skilled mechanic.

In addition to the Standard Lists showing sizes and prices of the various LENOX blades, designed to meet the many requirements of general industrial, special and individual uses, we have included data to guide you in selecting the best blade for your particular needs.

It is our hope that this information may serve you as both a cure and prevention of your cutting problems, and that you will refer to this catalog as your "Sawing Text Book," applicable to *all makes and brands* of hack saws and band saws.



AMERICAN SAW & MFG. COMPANY

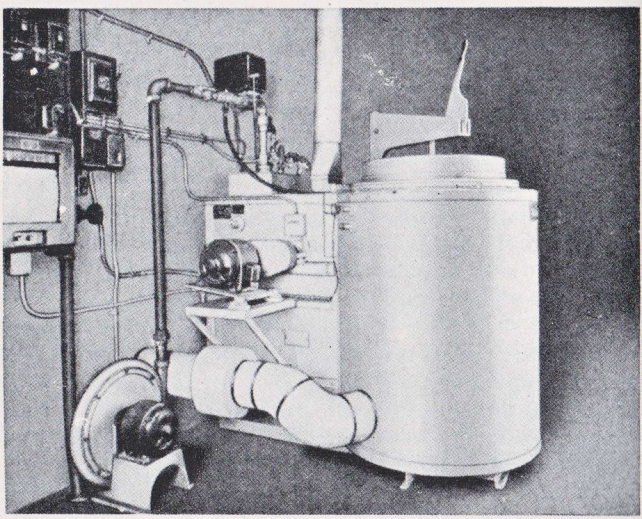
Springfield, Mass.

"THE BLADES IN THE PLAID BOX"

"LENOX"

Lenox Craftsmanship AND Modern Equipment

AS THE DEMANDS OF INDUSTRY have developed tougher and harder metals so have our metallurgists and technicians met the challenge by producing "LENOX" Saw Blades that will effectively and efficiently cut them. We have thus kept faith with industry in the past and will continue to remain in the foreground of progress.

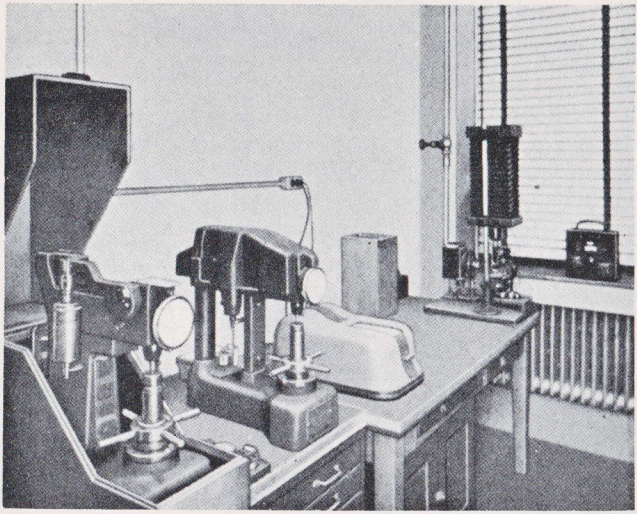


Most advanced developments in hardening and tempering equipment.

ALL STEELS USED in the manufacture of "LENOX" Blades are made to our specifications for the particular requirements of the different kind of blades. These steels are analyzed and tested to see that they conform in every particular to our standards. Our routine control testing starts at this point and continues through each stage of the processing, with a final inspection before packing.

"THE BLADES IN LENOX THE PLAID BOX"

Lenox Craftsmanship
AND
Modern Equipment



The "LENOX" Laboratory has all of the modern testing devices for inspection and research work.

IN ADDITION TO THIS ROUTINE laboratory inspection each Hack and Band Saw is progressively inspected throughout the different steps of its manufacture. Each of our skilled operators must approve all previous work on the material furnished him before processing it. In this manner all phases of manufacture are both checked and double-checked.

BY VIRTUE OF THIS DOUBLE DUTY on the part of our operators, plus the constant metallurgical and technical research and testing, we can assure you that "LENOX" Saw Blades excel not only in the finest quality of material, design and craftsmanship, but also in absolute uniformity.

Material Cutting Chart
Hand Hack Saw Blades

Material	Teeth per Inch
Aluminum — Solids	14
Angles — Heavy	18
Angles — Light	24
Babbitt	14
Brass — Solids up to 1″	18
Brass Pipe	24
Brass Tubing	24
Bronze — Solids up to 1″	18
BX Cable — Heavy	24
BX Cable — Light	32
Cast Iron — Up to 1″	18
Channels — Heavy	18
Channels — Light	24
Cable — Heavy	18
Copper — Solids up to 1″	14
Drill Rod — Over 1-4″	18
Drill Rod — No. 30 to 1-4″	24
Drill Rod — No. 30 and smaller	32
General Purpose Cutting	18
Iron Pipe	24
Metal Conduit	24
Sheet Metal — Over 18 ga.	24
Sheet Metal — Under 18 ga.	32
Steels — 1-4″ to 1″	18
Steels — 1-4″ and under	24
Tubing — Over 18 gauge	24
Tubing — Under 18 gauge	32

How to Use Hand Hack Saw Blades

Tighten blade in frame with teeth pointing away from operator. After a few strokes, retighten slightly if blade is slack.

Use long, steady, firm strokes on solids at approximate rate of 60 per minute.

Always position thin material at angle where as many teeth as possible will be engaged and use a somewhat light, easy stroke.

"LENOX"

Hackmaster

UNBREAKABLE

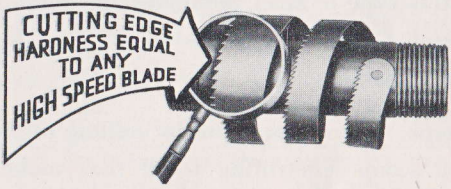
High Speed Steel Hand Hack Saw Blades

DESCRIPTION AND LIST PRICES

An outstanding LENOX DEVELOPMENT. Exceptional saws made of High Speed Steel that have the backs of the blades toughened so as to give them flexibility, and the teeth edges hardened for durability. Have all the cutting qualities of any High Speed Steel Blade.

BREAKAGE ELIMINATED. Inasmuch as these are truly unbreakable blades they will withstand hard usage, even misuse, without breaking. Sharp twists and kinks, which are the main reasons for saw breakage, are absorbed without damaging these blades.

ADVANTAGES. May be used under all awkward sawing conditions, or by inexperienced men, with complete satisfaction and fast cutting speed.



SAFETY. Hazards and accidents of sawing are eliminated by the use of these new Safety Hand Blades.

Hackmaster UNBREAKABLE

High Speed Steel Hand Blades

Length Inches	Width Inches	Thickness	CODE NUMBER 14 Teeth	18 Teeth	24 Teeth	32 Teeth	Wgt. per Gross Lbs.	List per Gross
10	1-2	23 ga. or .025	...	018MF	024MF	032MF	5	$46.00
12	1-2	23 ga. or .025	214MF	218MF	224MF	232MF	6 1-2	55.20
		EXTRA HEAVY HACKMASTER HAND BLADES						
12	5-8	21 ga. or .032	614MF	618MF	...	...	9 3-4	91.80

Packed 1-2 Gross in a box

"THE BLADES IN LENOX THE PLAID BOX"

"LENOX"

Mo-Speed
Molybdenum High Speed Steel All Hard Hack Saw Blades

DESCRIPTION

MOLYBDENUM STEEL is defined as "Possessing unusual toughness in relation to its hardness, great resiliency and tensile strength; taking a keen cutting edge, very high cutting efficiency with extreme endurance."

"LENOX" Mo-Speed Molybdenum High Speed Steel All Hard Hack Saw Blades are hardened and tempered to an unusual degree in our special treatment of this type of steel, retaining and refining all of the natural tough characteristics of this alloy for maximum durability.

The shape, contour, and precise milling of the teeth produce a scoop-penetrating tooth that makes chips roll out in a hurry.

They are tough saws, very hard although not brittle, and have a remarkable lasting quality. Take keen edge and retain it.

Excellent for production jobs as they are durable and do not constantly have to be replaced.

Their actual cost based on the work they will do on such a wide variety of materials makes them an economical choice.

"THE BLADES IN LENOX THE PLAID BOX"

"LENOX"
Mo-Speed
Molybdenum High Speed Steel
All Hard Hack Saw Blades
LIST PRICES

Mo-Speed Molybdenum High Speed Steel Hand Blades

Length Inches	Width Inches	Thickness	CODE NUMBER				Wgt. per Gross Lbs	List per Gross
			14 Teeth	18 Teeth	24 Teeth	32 Teeth		
10	1-2	23 ga. or .025	. . .	018M	024M	032M	5	$46.00
12	1-2	23 ga. or .025	214M	218M	224M	232M	6 1-2	55.20

Packed 1-2 Gross in a box

Mo-Speed Molybdenum High Speed Steel Power Blades

Length Inches	Width Inches	Thickness	CODE NUMBER		Wgt. per Gross Lbs.	List per Doz.	List per Gross
			14 Teeth	18 Teeth			
12	5-8	21 ga. or .032	614M	618M	9 3-4	$7.65	$91.80

Packed 1-2 Gross in a box

Length Inches	Width Inches	Gauge	Thickness	CODE NUMBER				Wgt. per Gross Lbs.	List per Doz.	List per Gross
				4 Teeth	6 Teeth	10 Teeth	14 Teeth			
12	1	18	.049	. . .	. . .	. . .	294M	25	$12.24	$146.88
	1	16	.065	. . .	. . .	250M	. . .	31 3-4	12.24	146.88
14	1	18	.049	. . .	. . .	350M	494M	27 1-2	14.28	171.36
	1	16	.065	. . .	. . .	450M	. .	35 1-2	14.28	171.36
	1 1-4	16	.065	464M	466M	460M	. . .	47	17.85	214.20
	1 1-2	15	.072	474M	476M	. . .	. . .	62	23.56	282.74
17	1	18	.049	. . .	. . .	. . .	794M	35	17.34	208.08
	1	16	.065	. . .	. . .	750M	. . .	44 1-2	17.34	208.08
	1 1-4	16	.065	764M	766M	760M	. . .	56	21.67	260.10
18	1	16	.065	. . .	. . .	850M	. .	47	18.36	220.32
	1 1-4	16	.065	864M	866M	860M	. . .	61	22.95	275.40

Packed one Dozen in a box

Extra Heavy *Mo-Speed* Molybdenum High Speed Steel Power Blades

Length Inches	Width Inches	Gauge	Thickness	CODE NUMBER		Wgt. per Gross Lbs	List per Doz.	List per Gross
				4 Teeth	6 Teeth			
18	1 1-2	15	.072	874M	876M	78	$30.29	$363.53
	2	15	.072	884M	886M	108	40.39	484.70
21	2	15	.072	184M	186M	132	47.12	565.49
	2		.100	104M	. . . . .	170	64.26	771.12
24	2	15	.072	484M	486M	146	53.85	646.27
	2		.100	404M	. . . . .	198	73.44	881.28
30	2 1-2		.100	204M	. . . . .	327	114.75	1377.00

Packed one Dozen in a box

All 14, 17 and 18 inch blades measure 13½, 16½ and 17½ inches respectively from center to center of holes.

For convenience and to avoid errors — order by code number.

"THE BLADES IN THE PLAID BOX"

"LENOX"

Tungsten High Speed Steel All Hard Hack Saw Blades

DESCRIPTION

TUNGSTEN HIGH SPEED STEEL is defined as "Possessing excellent cutting properties, retaining cutting edge even when heated to dull red by friction of chip which is removed; great wearing and abrasive resistance qualities."

"LENOX" Tungsten High Speed Steel Blades are manufactured under processes embodying all the latest automatically controlled heat treating equipment and scientific measuring instruments, with accurate inspections. Furthermore, and equally important, they are designed with a basic knowledge of practical working conditions to meet the most exacting demands of industry, with its complex cutting problems of today.

THE RESULT is a practical product adapted to your working conditions, rather than a theoretical ideal made according to the standard of manufacturing practice, but lacking the qualities of definite performance in the shop.

MADE from genuine Tungsten High Speed Steel. Give fast production as the teeth stand up and remain keen under high speeds and temperatures. Will cut unusually hard, dense steels with greatest freedom and longest life.

ALLOYS, the internal characteristics of which offer an extreme abrasive problem for sawing, are cut with complete satisfaction with "LENOX" Tungsten High Speed Steel Blades.

"THE BLADES IN THE PLAID BOX"

"LENOX"

Tungsten High Speed Steel All Hard Hack Saw Blades

LIST PRICES

Tungsten High Speed Steel Hand Blades

Length Inches	Width Inches	Thickness	CODE NUMBER 14 Teeth	18 Teeth	24 Teeth	32 Teeth	Wgt. per Gross Lbs.	List per Gross
10	1-2	23 ga. or .025	....	018	024	032	6 1-2	$48.42
12	1-2	23 ga. or .025	214	218	224	232	7 1-2	58.11

Packed 1-2 Gross in a box

Tungsten High Speed Steel Power Blades

Length Inches	Width Inches	Thickness	CODE NUMBER 14 Teeth	18 Teeth	Wgt. per Gross Lbs.	List per Doz.	List per Gross
12	5-8	21 ga. or .032	614	618	10	$9.00	$108.00

Packed 1-2 Gross in a box

Length Inches	Width Inches	Gauge	Thickness	CODE NUMBER 4 Teeth	6 Teeth	10 Teeth	14 Teeth	Wgt per Gross Lbs.	List per Doz.	List per Gross
12	1	18	.049	...	...	...	294	26 1-2	$14.40	$172.80
	1	16	.065	...	...	250	...	35	14.40	172.80
14	1	18	.049	...	...	350	494	30 1-2	16.80	201.60
	1	16	.065	...	...	450	...	40 1-2	16.80	201.60
	1 1-4	16	.065	464	466	460	...	50	21.00	252.00
	1 1-2	15	.072	474	476	...	...	67	27.72	332.64
17	1	18	.049	...	...	...	794	37	20.40	244.80
	1	16	.065	...	...	750	...	48	20.40	244.80
	1 1-4	16	.065	764	766	760	...	61 1-2	25.50	306.00
18	1	16	.065	...	...	850	...	50 1-2	21.60	259.20
	1 1-4	16	.065	864	866	860	...	64	27.00	324.00

Packed one Dozen in a box

Extra Heavy Tungsten High Speed Steel Power Blades

Length Inches	Width Inches	Gauge	Thickness	CODE NUMBERS 4 Teeth	6 Teeth	Wgt. per Gross Lbs.	List per Doz.	List per Gross
18	1 1-2	15	.072	874	876	85	$35.64	$427.68
	2	15	.072	884	886	120	47.52	570.24
21	2	15	.072	184	186	145	55.44	665.28
	2		.100	104	...	189	75.60	907.20
24	2	15	.072	484	486	159	63.36	760.32
	2		.100	404	...	213	86.40	1036.80
30	2 1-2		.100	204	...	356	135.00	1620.00

Packed one Dozen in a box

All 14, 17 and 18 inch blades measure 13½, 16½ and 17½ inches respectively from center to center of holes.

For convenience and to avoid errors — order by code number.

"THE BLADES IN LENOX THE PLAID BOX"

"LENOX"

Standard Steel Hack Saw Blades

DESCRIPTION AND LIST PRICES

FLEXIBLE BACK STYLE HAND BLADES — The "LENOX" Flexible Blades are hardened on the teeth only, the backs being left soft which prevents breakage.

Flexible Hand Blades

Length Inches	Width Inches	Thickness	CODE NUMBER 14 Teeth	18 Teeth	24 Teeth	32 Teeth	Wgt. per Gross Lbs.	List per Gross
10	1-2	23 ga. or .025	....	1018F	1024F	1032F	4 3-4	$11.50
12	1-2	23 ga. or .025	1214F	1218F	1224F	1232F	5 3-4	13.80

Packed 1-2 Gross in a box

ALL-HARD STYLE HAND BLADES —

These blades are of the same hardness throughout the saws. If possible use at bench where work can be securely clamped, so as not to twist or kink saw.

All-Hard Hand Blades

Length Inches	Width Inches	Thickness	CODE NUMBER 14 Teeth	18 Teeth	24 Teeth	32 Teeth	Wgt. per Gross Lbs.	List per Gross
10	1-2	23 ga. or .025	....	1018	1024	1032	4 3-4	$11.50
12	1-2	23 ga. or .025	1214	1218	1224	1232	5 3-4	13.80

Packed 1-2 Gross in a box

Jewelers' Hack Saw Blades

Small hack saw blades for use in wire frames. Very handy for cutting wood, mica, bakelite, tubing, wire and any metals of small dimensions.

No.	Style	Length Inches	Width Inches	Gauge Thickness	Teeth per Inch	List per Gross
1	With Pin Holes	6	1-4	28 or .014	32	$10.35
2	With Permanent Pins	6	1-4	28 or .014	32	10.35

Wired in dozen lots — packed in gross boxes.

"LENOX"

How to use Power Hack Saw Blades

INSPECT POWER MACHINES frequently thus assuring good operating conditions.

CUTTING LUBRICANT should always be used except on cast iron. This will keep the blade cool; avoid friction and assist in clearing the chips from the cut.

BLADE SPECIFICATION SELECTION as to width and length should be in accordance with the recommendations of the machine manufacturer. The correct teeth per inch for the material to be cut can be determined by referring to the "Material Cutting Chart" on page 15.

TEETH MUST POINT CORRECTLY. Check teeth when inserting the blade; i.e., toward the machine on a draw-cut machine; away from it on a push-cut machine.

WEIGHT OR PRESSURE is important, particularly with a new blade. Too much pressure will quickly destroy it and too little pressure will dull the teeth with a consequent rubbing or sliding stroke instead of a cutting stroke.

INCREASE PRESSURE as blade wears to maintain proper cutting action.

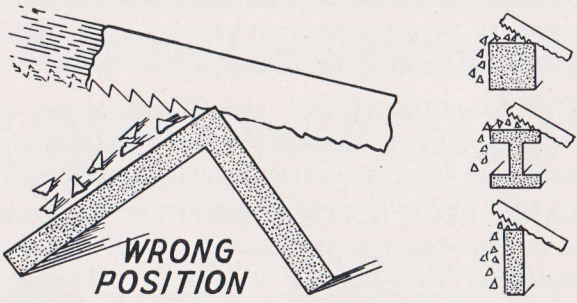
SPEED OR STROKE PER MINUTE. Refer to "Material Cutting Chart," page 15.

TIGHTEN BLADE after one or two cuts when using a new blade, as blade has tendency to stretch. A loose blade will not cut straight and will wear out or break quicker than a tight blade.

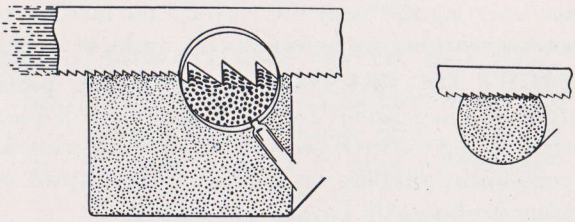
REPLACING WORN BLADE with a new blade in the *SAME CUT* should be avoided as it will probably wedge and break. Turn material over and saw from opposite side with new blade.

NEW BLADES should replace worn blades as the latter cease to cut efficiently. The waste in power and labor far exceeds the cost of a new blade.

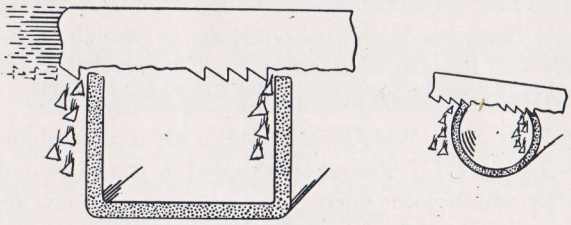
Hack Sawing Practice



Teeth strike sharp edge

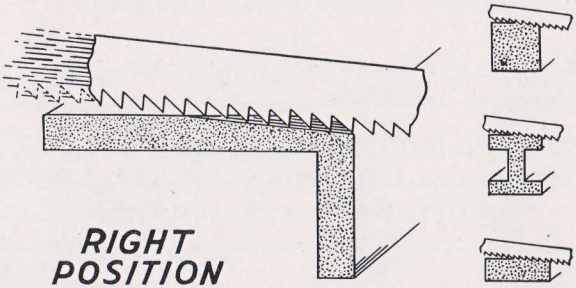


WRONG - Teeth too fine for cutting large solids. Clog in cut.

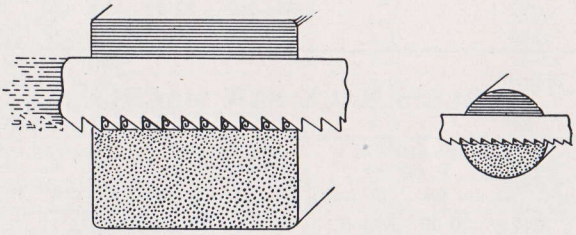


WRONG - Teeth too Coarse - Rip out on thin wall material.

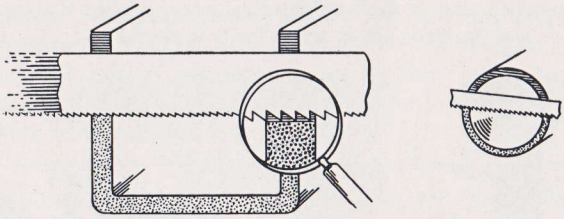
Hack Sawing Practice



Several teeth contact work



RIGHT - Coarse teeth
Clear chips freely in large solids



RIGHT - Fine teeth - Two or more teeth cutting on thin wall stock

"LENOX"

Torque Wrench Tensioning Power Hack Saw Blades

We are charting below a suggested tension for Power Hack Saw Blades.

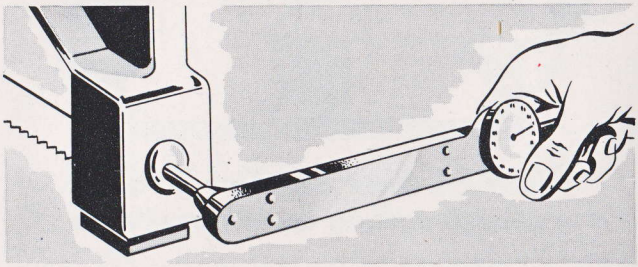
MARVEL-RACINE-SAWMORE-RASMUSSEN ROBERTSON-MILLER KNUTH-KELLER AND OTHER HACK SAW MACHINES

Blade Width Inches	Blade Thickness Inches	6 x 6		10 x 10		18 x 18	
		In. Lbs.	Ft. Lbs.	In. Lbs.	Ft. Lbs.	In. Lbs.	Ft. Lbs.
1	.065	96-120	8-10	.....	.....	.....	.....
1 1-4	.065	120-144	10-12	192-216	16-18	.....	.....
1 1-2	.072	144-168	12-14	216-240	18-20	.....	.....
2	.072	.....	.....	264-300	22-25	360-420	30-35
2	.100	.....	.....	300-336	25-30	384-444	32-37

PEERLESS HACK SAW MACHINES

Blade Width Inches	Blade Thickness Inches	PEERLESS Standard		PEERLESS 4-Sided Frame		PEERLESS 16" Vertical	
		In. Lbs.	Ft. Lbs.	In. Lbs.	Ft. Lbs.	In. Lbs.	Ft. Lbs.
1	.065	30-36	2½-3	30-36	2½-3	.....	.....
1 1-4	.065	36-42	3-3½	48-60	4-5	96-108	8-9
1 1-2	.072	72-78	6-6½	72-78	6-6½	132-144	11-12
2	.072	96-108	8-9	96-108	8-9	180-192	15-16
2	.100	108-120	9-10	108-120	9-10	192-204	16-17

CAUTION: In arriving at proper tension on any hack saw machine it is assumed that both the tightening screw is oiled and works freely — and the blade holder works freely in the frame.



"THE BLADES IN LENOX THE PLAID BOX"

"LENOX"

Material Cutting Chart
Power Hack Saw Blades

Tungsten High Speed Steel
and
Mo-Speed Molybdenum High Speed Steel

Material	Teeth per Inch	Strokes per Minute
Alloy Steels	4-6	60-90
Aluminum Alloy	4-6	100
Aluminum — Pure	4-6	100
Brass Castings — Soft	6-10	90
Brass Castings — Hard	6-10	90
Bronze Castings	6-10	90
Cast Iron	6-10	90-120
Copper — Drawn Bars	4-6	90
Carbon Tool Steel	6-10	90
Cold Rolled Steel	4-6	120
Die Blocks	4-6	60-90
Drill Rod	10	90
Forgings	4-6	60-90
High Speed Steel	4-6	60-90
Machinery Steel	4-6	90-120
Malleable Iron	6-10	90-120
Manganese Bronze	6-10	60
Nickel Alloys	6-10	60
Pipe, Iron	10-14	120
Rails	6-10	60-90
Stainless Steel	6-10	60
Structural Steel	6-10	90-120
Tubing — Heavy Wall	6-10	120
Tubing — Light Wall	14	120

Use Cutting Compound for all materials except cast iron.

Where more than one tooth specification is recommended, determine the choice by the size and shape of the material. If it is in the form of large sections of solid stock the logical reasoning is to use the coarser tooth. For cutting the smaller stock the finer tooth would be better adapted.

NOTE: The above recommendations are made knowingly in somewhat approximate and conservative fashion. It is obvious that the mechanical condition and type of the hack saw machines used would considerably vary cutting conditions.

"LENOX"

Power Hack Saw Blade Troubles

CAUSE AND REMEDY

KIND OF TROUBLE	DUE TO	REMEDY
Teeth Wearing Out Prematurely	Too high speed.	See Chart, Page 15, and reduce the speed as recommended for the material being cut.
	Too much pressure.	If you apply excessive pressure on a hand blade, you *feel* the abnormal strain on the saw. Power blades react to similar abuses. Be conservative.
	Failure of blade to lift on the return stroke.	Inspect the machine and make necessary adjustment.
	Teeth facing incorrectly.	See that teeth face toward the machine if a draw-cut type, and away from it if a push-cut machine.
	Wrong type blade for the material.	See Chart, Page 15, and use blade recommended "teeth per inch" for material being cut.
	Lack of Proper Cutting Compound.	Use soluble cutting oil mixed about 7 to 1.
Blades Not Cutting Straight	Blade loose in frame.	Tighten blade to secure proper tension.
	Material loose in vise.	Arrange material in position so that it can be clamped securely and tighten vise.
	Saw frame badly worn in slide or out of perpendicular alignment.	Inspect adjustment of machine and make necessary repairs.
	Too much pressure.	Reduce pressure and notice the improvement in alignment cutting and satisfaction.
	Excessively hard spot in material forcing blade out of straight path.	Turn material over and start a new blade if set has become unevenly worn.
	Blade worn out.	Replace with new blade. An over-dull blade is neither efficient nor economical.

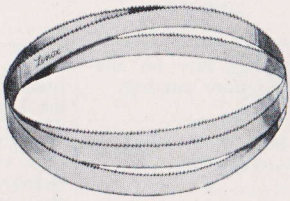
Power Hack Saw Blade Troubles

CAUSE AND REMEDY

KIND OF TROUBLE	DUE TO	REMEDY
Blade Breakage	Dropping saw on material before cutting.	Start machine with blade above work and let down gradually.
	Cutting on too sharp an edge or corner.	Set the work so that several teeth will be engaged at the start of the cut.
	Using a new blade to finish a cut made with a worn blade.	Turn material over and saw from opposite side with a new blade.
	Too little tension in the blade.	Be sure the blade is properly mounted—then increase tension.
	Material jamming against blade when cut through.	Make provision so that loose piece drops away from the blade.
	Too heavy feed when cutting thin sections.	Reduce the pressure.
	Continuing to use a worn-out blade.	Replace with new blade.
Breakage of the Blade at Pinhole	Excessive tension.	Reduce blade tension so that it is just taut but not slack.
	Blade not properly mounted.	See that saw is flat against blade holders and pins drawn up to end of eye before final clamping and tensioning of saw.
	Pins or mounting plates worn or grooved.	Replace these inexpensive parts.
Teeth Ripping Out	Too fine a blade for large material.	See Chart, Page 15, and select blade with recommended "teeth per inch" for the material being cut.
	Too coarse a blade for thin sections.	
	Sawing against corner or sharp edge of work.	Position material in machine vise so that several saw teeth engage work.

Regular
Flexible Back - Metal Cutting
Band Saw Blades

DESCRIPTION



Description. Our special heat treating method tempers only the saw teeth producing an unusually hard cutting edge. The rest of the saw is flexible so that it freely bends over wheels and turns through guide rollers of band saw machine. For the majority of operations the saws are most advantageously used at low speeds.

Constant Development. Our research laboratory and metallurgists have kept a step in advance of the trend of changing types of materials being sawed in modern industry, such as harder alloy steels, tougher non-ferrous metals, new special compositions, fibers, plastics, bakelite, etc., and we have keyed our development to correspond in producing saws that satisfactorily and economically cut all such materials.

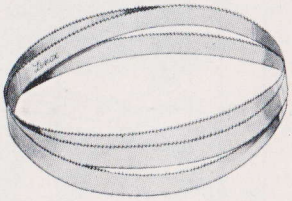
Saw Instead of Scrape. Teeth are accurately milled to a scientific design that brings out helical chips in sawing rather than merely performing a scraping action. Regular Set Teeth in which one tooth is set right, the next set left, followed by a straight raker tooth which clears kerf of chips is furnished. This form of set steadies the saw in the cut which is a particularly important essential of efficient sawing. The cut is smooth. Very little material is displaced which effects considerable saving when sawing expensive materials.

Special Welds. A most advanced technique provides a weld that is as strong as any other portion of the band. Troublesome breakage is eliminated.

"LENOX"

Regular
Flexible Back - Metal Cutting
Band Saw Blades

LIST PRICES



Cut to Length — Welded

Lengths Inclusive from	to	Widths Under 3-8"	3-8"	1-2"	5-8"	3-4"	1"
4'-6"	5'-5"	$1.20	$1.24	$1.28	$1.44	$1.56	$1.80
5'-6"	6'-5"	1.32	1.37	1.42	1.61	1.75	2.04
6'-6"	7'-5"	1.44	1.50	1.55	1.78	1.94	2.28
7'-6"	8'-5"	1.56	1.62	1.69	1.94	2.14	2.52
8'-6"	9'-5"	1.68	1.75	1.82	2.11	2.33	2.76
9'-6"	10'-5"	1.80	1.88	1.96	2.28	2.52	3.00
10'-6"	11'-5"	1.92	2.01	2.10	2.45	2.71	3.24
11'-6"	12'-5"	2.04	2.14	2.23	2.62	2.90	3.48
12'-6"	13'-5"	2.16	2.26	2.37	2.78	3.10	3.72
13'-6"	14'-5"	2.28	2.39	2.50	2.95	3.29	3.96
14'-6"	15'-5"	2.40	2.52	2.64	3.12	3.48	4.20
15'-6"	16'-5"	2.52	2.65	2.78	3.29	3.67	4.44
16'-6"	17'-5"	2.64	2.78	2.91	3.46	3.86	4.68
17'-6"	18'-5"	2.76	2.90	3.05	3.62	4.06	4.92
18'-6"	19'-5"	2.88	3.03	3.18	3.79	4.25	5.16
19'-6"	20'-5"	3.00	3.16	3.32	3.96	4.44	5.40
20'-6"	21'-5"	3.12	3.29	3.46	4.13	4.63	5.64
21'-6"	22'-5"	3.24	3.42	3.59	4.30	4.82	5.88
22'-6"	23'-5"	3.36	3.54	3.73	4.46	5.02	6.12

Lineal Lengths

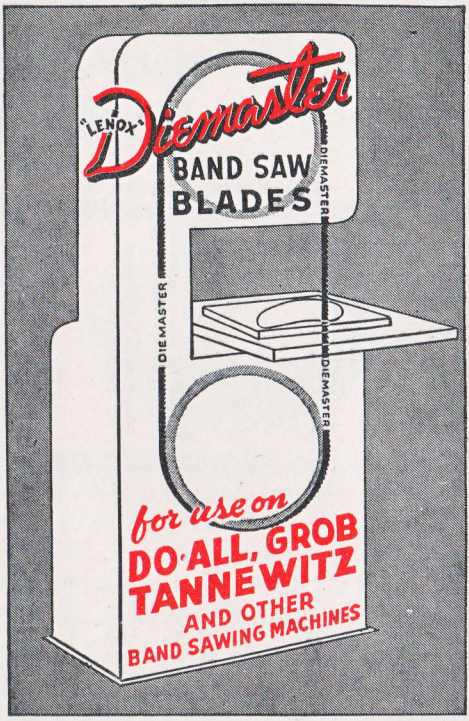
Width	Gauge	Teeth we can furnish								Feet per Pound	List per Foot	Welding Each
1-8"	23 ga. or .025					14	18	24		120	$0.12	$0.60
3-16"	23 ga. or .025			10		14	18	24	32	70	.12	.60
1-4"	23 ga. or .025			10	12	14	18	24	32	60	.12	.60
3-8"	23 ga. or .025		8	10		14	18	24		35	.128	.60
1-2"	23 ga. or .025	6		10		14	18	24		25	.136	.60
5-8"	21 ga. or .032		8	10		14	18	24		16	.168	.60
3-4"	21 ga. or .032	6	8	10*	12*	14	18			12	.192	.60
1"	20 ga. or .035	6	8	10		14				9	.24	.60

Note: All 32 teeth are wavy set only.

*¾" 10 and 12 teeth can be furnished in either wavy or raker set.

All other specifications are raker set only.

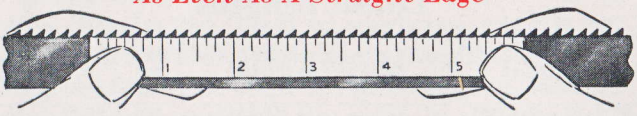
"THE BLADES IN THE PLAID BOX"



Precision-Edge Sawing—"LENOX" Diemaster Metal Band Saws leave a smooth edge to the work. Their set is so accurate that definite allowance can be made for the material which will be removed by the path of the saw. Such efficiency and dependability saves the user considerable expense in machining and smoothing out rougher cuts.

Perfection in Hardness Depth—

"As Even As A Straight Edge"



Maintained with absolute uniformity, just to base of teeth, by "LENOX" Diemaster method of temper control.

This insures Shape-Cutting Facility—

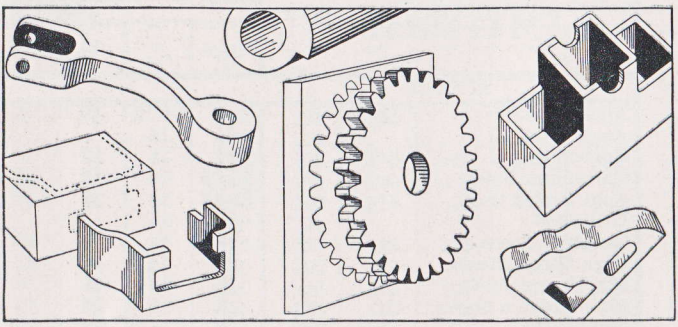
PROPER WIDTH SAW FOR CONTOUR CUTTING					
For Minimum Radius	2"	1 1-4"	5-8"	3-8"	3-16"
Use Saw Width	1-2"	3-8"	1-4"	3-16"	1-8"

"LENOX"

"LENOX" Diemaster

Metal Cutting Band Saw Blades

Samples of "LENOX" Diemaster Precision Edge Sawing



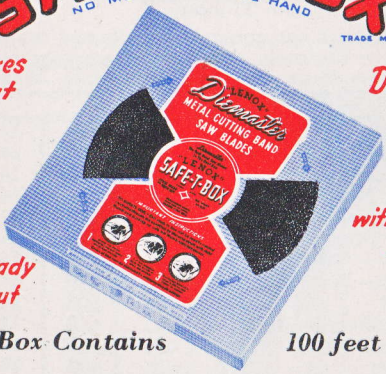
"LENOX"

SAFE-T-BOX

NO METAL TO CUT THE HAND

TRADE MARK

No wires to cut



Dangerous loose ends can be withdrawn into box

Stock ready to draw out

Box Contains 100 feet

LIST PRICES

Width	Thickness	Teeth we can furnish								Feet per Pound	List per Foot	List per 100′ Box
1-8″	23 ga. or .025					14	18	24		120	$0.12	$12.00
3-16″	23 ga. or .025			10		14	18	24	32	70	.12	12.00
1-4″	23 ga. or .025			10	12	14	18	24	32	60	.12	12.00
3-8″	23 ga. or .025		8	10		14	18	24		35	.128	12.80
1-2″	23 ga. or .025	6		10		14	18	24		25	.136	13.60
5-8″	21 ga. or .032		8	10		14	18	24		16	.168	16.80
3-4″	21 ga. or .032	6	8	10*	12*	14	18			12	.192	19.20
1″	20 ga. or .035	6	8	10		14				9	.24	24.00

Note: All 32 teeth are wavy set only.

* ¾″ 10 and 12 teeth can be furnished in either wavy or raker set.

All other specifications are raker set only.

"THE BLADES IN THE PLAID BOX"

"LENOX"

Material Cutting Chart Flexible Back - Metal Cutting Band Saw Blades

We have specified in red the correct blade and speed selections for miscellaneous sawing where it is not economical to change blades.

MATERIAL	SIZE OF TEETH PER			
	Under 1/4"	1/4" to 3/4"	1"	2"
STEELS				
Armor Plate	18	14-12	10	8
Angle Iron	24	14	..	..
Carbon Steels	24	14	12	10
Chromium Steels	24-18	14	12	10
Cold Rolled Steel	24-18	14	12	10
Drill Rod	14	14	..	..
Graphite Steels	18	14	12	10
High Speed Steels	24	14	12	10
Machinery Steels	18	14	12	10
Molybdenum Steels	18	14	12	10
Nickel Steels	18	14	12	10
Silicon Manganese	18	14	12	10
Stainless Steels	24	14	10	10
Structural Steels	24	14	12	..
Tungsten Steel	18	14	10	8

NOTE: SHEETS AND TUBING

Blade, teeth and speeds for sheets and tubing vary according to the thickness involved and whether material is Aluminum, Brass, Bronze, Copper, Duralumin, Magnesium or Steel.

FOUNDRY METALS				
Brass — Hard	18	14	10	10
Brass — Soft	18	14	10	10
Bronze — Aluminum	18	14	12	10
Bronze — Manganese	18	14	12	10
Bronze — Naval	18	14	12	10
Bronze — Phosphorus	18	14	12	10
Cast Iron — Gray	18	14	10	8
Cast Iron — Malleable	18	14	12	10
Cast Steel	18	14	12	8
Copper — Beryllium	18	12	10	10
Copper — Drawn	18	10	8	6
Gunnite	24	18	14	10
Meehanite	18	14	10	8
Monel	18	14	10	10
Nickel — Cold Rolled	14	10	8	8
Nickel Silver	18	14	12	10
Silver	24	18	14	10
NON METALS				
Cork	10	10	8	8
Fibre	14	10	8	8
Mica	24	18	14	12
Plastics	14	12	10	8
Porcelain	24	18	..	..
Slate	24	18	14	12
Transite	32-24	18	14	10

"THE BLADES IN THE PLAID BOX"

"LENOX"

Material Cutting Chart
Flexible Back - Metal Cutting Band Saw Blades

However, the recommendations below represent the most efficient specifications for continuous sawing on the individual materials listed.

MATERIAL INCH			SIZE OF MATERIAL SPEED — FEET PER MINUTE					
3"	4" and Over		Under 1/4"	1/4" to 3/4"	1"	2"	3"	4" and Over
8	6		150	125	100	75	75	50
..	..		175	150	....	....	....	....
8	6		250	200	175	150	125	100
8	6		150	125	100	100	75	50
8	6		250	200	175	150	150	125
..	..		100	100	....	....	....	....
8	6		175	150	125	100	100	75
8	8		150	100	75	75	50	50
8	6		250	200	175	150	150	125
8	8		150	125	100	75	75	50
8	8		150	125	100	75	75	50
8	6		175	150	100	75	50	50
6	6		100	100	75	50	50	50
..	..		175	150	125	....	....	....
6	6		175	150	100	75	50	50
			Send samples to our laboratory for test cutting and blade, teeth and speed recommendations.					
8	6		500	400	350	300	250	200
8	6		1500	1000	750	500	400	300
8	6		500	400	300	225	150	100
8	6		300	250	225	200	175	150
8	6		300	275	250	225	200	150
8	6		500	400	300	200	175	150
8	6		200	175	150	100	75	75
8	6		200	175	150	150	125	125
8	6		225	200	150	100	75	75
8	6		400	350	350	250	200	150
6	6		1100	700	500	350	250	200
8	6		300	200	175	150	125	100
8	6		150	100	75	75	50	50
6	6		200	150	100	75	50	50
6	6		200	150	100	75	50	50
8	6		250	250	200	175	150	125
8	6		250	250	200	175	150	150
6	6		1500	1500	1500	1500	1500	1500
6	6		1500	1500	1500	1500	1500	1500
10	8		350	200	200	200	150	150
6	6		4500	4500	4500	4500	3500	3000
			200	150	....	....	....	....
10	8		300	250	200	200	150	100
8	6		1000	600	50	50	50	50

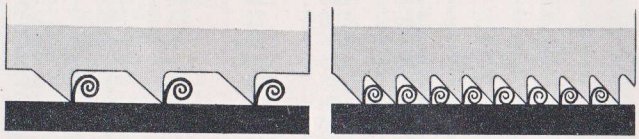
"LENOX"

"LENOX" Skip-a-Tooth

TRADE MARK

Hard Edge – Flexible Back Band Saw Blades

SKIP-A-TOOTH HARD EDGE FLEXIBLE BACK BAND SAW BLADES are especially adapted for soft sticky metals that have a tendency to clog in the gullets of the regular saw teeth. The tooth spacing of Skip-A-Tooth with its wide, flat gullet, permits free chip clearance.



Skip-A-Tooth | Conventional Tooth

ALUMINUM AND MAGNESIUM are cut with freedom, speed and ease with Skip-A-Tooth. Many of the large aircraft companies and the major aluminum and magnesium foundries as well as manufacturers that cut this type of material, are using Lenox Skip-A-Tooth Band Saws with splendid results.

PLASTIC SOLIDS over ¼" lend themselves to Skip-A-Tooth sawing. The cutting chart on pages 26 and 27 details the wide variety of plastics and their respective Skip-A-Tooth application.

WOOD CUTTING with Skip-A-Tooth has contributed the only real advancement in wood band sawing in decades. Hard woods such as hickory, oak, mahogany and walnut are especially cut with speed and ease. The ordinary wood cutting band saw blades quickly lose their sharp teeth and set. Frequent refiling, resetting and changing of blades is necessary, resulting in uneconomical but unavoidable added costs and interruptions in wood cutting.

SKIP-A-TOOTH BAND SAW BLADES with their file-hard teeth precludes any necessity for resharpening and resetting. When dull it is fundamental economy to discard the worn saw and replace with a new Skip-A-Tooth.

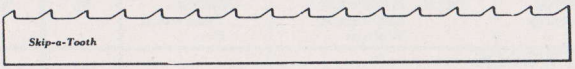
"LENOX"

"LENOX" Skip-a-Tooth

TRADE MARK

Hard Edge – Flexible Back Band Saw Blades

LIST PRICES



Skip-a-Tooth

Cut to Length — Welded

Lengths Inclusive from	to	Widths and Thicknesses 1-4"	1-2"	3-4"	1"
4'-6"	5'-5"	$1.20	$1.28	$1.56	$1.80
5'-6"	6'-5"	1.32	1.42	1.75	2.04
6'-6"	7'-5"	1.44	1.55	1.94	2.28
7'-6"	8'-5"	1.56	1.69	2.14	2.52
8'-6"	9'-5"	1.68	1.82	2.33	2.76
9'-6"	10'-5"	1.80	1.96	2.52	3.00
10'-6"	11'-5"	1.92	2.10	2.71	3.24
11'-6"	12'-5"	2.04	2.23	2.90	3.48
12'-6"	13'-5"	2.16	2.37	3.10	3.72
13'-6"	14'-5"	2.28	2.50	3.29	3.96
14'-6"	15'-5"	2.40	2.64	3.48	4.20
15'-6"	16'-5"	2.52	2.78	3.67	4.44
16'-6"	17'-5"	2.64	2.91	3.86	4.68
17'-6"	18'-5"	2.76	3.05	4.06	4.92
18'-6"	19'-5"	2.88	3.18	4.25	5.16
19'-6"	20'-5"	3.00	3.32	4.44	5.40
20'-6"	21'-5"	3.12	3.46	4.63	5.64
21'-6"	22'-5"	3.24	3.59	4.82	5.88
22'-6"	23'-5"	3.36	3.73	5.02	6.12

Lineal Lengths

Width	Gauge	Teeth we can furnish					Feet per Pound	List per Foot	Welding Each
1-4"	23 ga. or .025			4		6	60	$0.12	$0.60
1-2"	23 ga. or .025		3	4			25	.136	.60
3-4"	21 ga. or .032		3				12	.192	.60
1"	20 ga. or .035	2	3				9	.24	.60

Note: "Skip-a-Tooth" Band Saw Blades are definitely not suggested for all cutting operations. For sawing hard metals we recommend the regular Flexible Back type listed on pages 18-19.

Material Cutting Chart
Skip-A-Tooth
Band Saw Blades

MATERIAL	SIZE OF TEETH PER ½" and Under	SIZE OF TEETH PER Over ½" to 2"
BUILDERS BOARD Celotex, Electrite, Femboard, Fibrafelt, Kimflex, Masonite, Temlock, Etc.	6	4
HARDWOODS Beech, Birch, Cherry, Elm, Hickory, Mahogany, Walnut, Oak, Poplar, Teakwood, Etc	6	4
PLYWOODS Douglas Fir, Mengelbord, Pregwood, Weldwood, etc.	6	4
SOFTWOODS Balsa, Fir, Pine, Redwood, Spruce, Etc.	6	4
PLASTICS NOTE: The majority of plastic solids cut efficiently with SKIP-A-TOOTH. Some types of plastics lend themselves to more pronounced results with the Regular Band Saw Blades. Sheets under ¼" thickness and tubing under ¼" wall thick-		
Bakelite, Baker Resin, Beetle, Butacite, Butvar, Catalin, Cibanoid, Crystalite, Farlite, Fibestos, Formica, Gemstone, Herculoid, Insurok, Lamicoid, Loalin, Lustron, Lucite, Lamarith, Marblette, Micarta, Nixonite, Opalon, Etc, Panelyte, Phenolite, Plastacele, Plaskon, Plexiglas, Prystal, Saflex, Styron, Tenite, Textelite, Uformite, Vinylite	6	4
MISCELLANEOUS		
Aluminum	3	3
Asbestos	4	4
Babbitt	4	3
Brake Lining	6	4
Carbon	4	3
Copper	6	4
Duralumin	3	3
Hair — Rubberized	6	6
Lead	6	4
Magnesium	3	3
Paper Board	6	4
Rubber — Hard	6	4
Rubber — Sponge	6	6
Sisal — Rubberized	6	6
Zinc	6	4

"LENOX"

Material Cutting Chart
Skip-A-Tooth
Band Saw Blades

MATERIAL INCH			SIZE OF MATERIAL SPEED — FEET PER MINUTE			
3" to 4"	5" to 6"		½" and Under	Over ½" to 2"	3" to 4"	5" to 6"
4	3		4000	3500	3000	2500
4	3		4500	4200	4000	4000
3	2		4500	4200	4000	3800
3	2		4500	4200	4000	3800

ness are not adapted to SKIP-A-TOOTH.

Send plastic samples, both solids, sheets and tubes to our laboratory for test cutting and blade, teeth and speed recommendations.

3	2		4500	4000	3500	3000
3	2		2500	2000	1500	1500
3	2		1500	1200	1000	1000
3	2		1500	1500	1500	1500
..	..		1200	1100	....	....
2	2		4000	3500	3000	3000
3	2		3000	2500	2000	1500
3	2		4000	4000	3000	2000
6	6		4500	4000	3500	3000
3	3		3000	2500	2000	1500
3	2		4000	4000	4000	4000
4	3		1300	1200	1200	1000
3	2		4000	3000	3000	3000
6	4		4500	4000	3800	3000
6	6		4500	4000	3500	3000
3	3		3000	2500	2000	1500

Metal Band Saw Blade Troubles

REMEDY

Metal Band Saw Blade troubles are often caused by faulty machine adjustment or operation.

A used band saw blade, in many cases, gives evidence of this condition.

EXAMPLES:

Excessive weld breakage
Teeth cracked and shelled out
Wear on one or both sides of set
Grooves in side of band
Bands bowed toward and away from teeth
Back of band flattened out

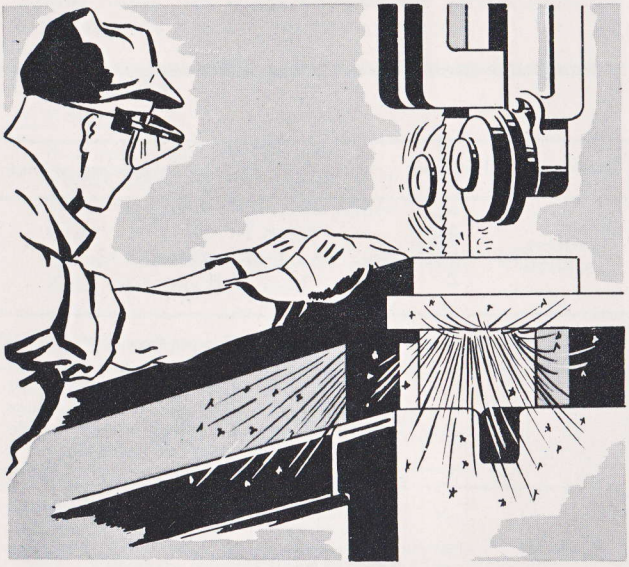
We suggest that you double-check all the following points.		
ADJUSTMENTS	DOUBLE CHECK √	CAUTIONS
Proper Teeth and Speeds	√	See Chart on pages 22 – 23.
Guide Adjustments	√	Eccentric Roller should not be tightened so much as to put "S" kink in band.
	√	See that guide rollers revolve; watch the one under table.
	√	Guide rollers or plates should just touch, not pinch band; just tighten enough to hold band in alignment for straight cutting.
	√	When machine is running idle, back of band should barely touch guide rollers.
	√	Guide rollers are the heart of your band saw machine. It is economy to replace or repair when they become even moderately worn.
	√	Always lower slide with upper guide rollers so that it will just pass over top of work. The shorter the distance between upper and lower guide rollers the more support the band is given.

Metal Band Saw Blade Troubles

REMEDY

We suggest that you double-check all the following points.		
ADJUST-MENTS	DOUBLE CHECK ✓	CAUTIONS
Mounting Blade	✓	IMPORTANT. Set portion of the teeth should be in the clear — cover entire circumference of band to see that set portion of teeth is in the clear and does not touch or rub against wheels, guide rollers, or other parts of machine.
	✓	AVOID EXCESSIVE TENSION — just tighten enough so band does not slip in work.
	✓	Release band tension at night.
	✓	Band Saw Blade should be absolutely perpendicular between guide rollers when facing both teeth edge and side of saw.
	✓	Be sure teeth face toward the work.
	✓	Remove dull bands as they will cut crooked.
Wheel Adjust-ments	✓	On wheels equipped with rubber tires adjust so band tracks in center of tread.
	✓	Keep rubber tires clear of chips and replace when badly worn.
	✓	Unless worn shafts and bearings are replaced they will cause very costly troubles.
General Informa-tion	✓	Additional information on cutting fundamentals which apply to both Hack Saw and Band Saw Blades is covered on Pages 16 and 17.

FRICTION CUTTING
WITH
Metal Cutting Band Saw Blades



Friction cutting with metal band saw blades traveling at tremendously high speeds is ordinarily a melting-burning procedure as distinguished from the conventional slower speed sawing operations.

High speeds are essential to generate sufficient heat to melt and burn away the material being cut. High speeds are further necessary to eliminate dissipation of temperature in the kerf. In other words, concentrated heat must apply at all times.

Band saw friction cutting has its limitations and does not replace general band sawing operations. Friction cutting, in some instances, will have a tendency to work-harden certain materials and it may create burns that require an additional filing or grinding operation. However, the advantageous applications of friction cutting by band saw are many and varied.

FRICTION CUTTING
WITH
Metal Cutting Band Saw Blades

RANGE OF APPLICATIONS.

The automotive industry has applied the band saw friction method to the cutting of mild steel up to ¼" thick and also on non-ferrous metals of greater thickness.

The aviation industry uses friction cutting by band saws, on both mild and hard steels up to 1" thick and stainless steels up to ¾" thick with eminently satisfactory results.

Heavy industry is successfully friction cutting with band saws on formed sheet metals and armor plate.

The plastic industry, in general, has not adopted friction cutting. There are, however, certain types of plastics that lend themselves to this method.

SAW RECOMMENDATIONS.

Each problem of friction cutting with band saws presents its own blade application. Therefore, to determine whether friction cutting will be adaptable and economical, submit to us the following:

1. A generous sample of the material to be cut.
2. Type of band saw machine.
3. Maximum and minimum speeds available on your band saw machine.
4. Length of blade.

Our experimental laboratory will then proceed to test-cut your material and make specific blade and speed recommendations.

Spring Temper-Metal Cutting Band Saw Blades

DESCRIPTION

"LENOX" QUALITY: Made from a special steel which will withstand high speeds without crystalizing and cracking. Holds keenness of cutting edge an exceptionally long time.

NOTE: Spring Temper-Metal Band Saws with their limited applications should be definitely distinguished from Flexible Back, Hard Edge, Metal Band Saws as listed on page 19 whose usage, in a general sense, covers the same range as Hack Saw Blades.

APPLICATIONS: Used for sawing magnesium and aluminum castings and sheets, high speed cutting of stainless steel sheets, formed sheet metals, special compositions, soft brass, tubing, bakelite and fibre.

RESHARPENING: Bands can be resharpened and reset when they become dull.

TEETH: Regular style teeth are ordinarily furnished. Bull or "Pullman" teeth can be furnished for operations where such use is appropriate.

APPROXIMATE RECOMMENDATIONS

Materials	Teeth	Speeds Feet per Min.
Magnesium Castings	3-4	5000 and up
Magnesium Sheets	6	5000 and up
Aluminum Castings	3-4	5000 and up
Aluminum Sheets	6	5000 and up
Stainless Steel Sheets	8-10	5000 and up
Formed Sheet Metals	6	5000 and up
Special Compositions	4-6	5000 and up
Soft Brass	6-8	5000 and up
Tubing	6	5000 and up
Bakelite	4-6	5000 and up
Fibre	4-6	5000 and up

Note: Spring Temper Band Saw Blades have one more point per inch than teeth per inch, i. e., 4 teeth per inch are 5 points per inch

"LENOX"

Spring Temper - Metal Cutting Band Saw Blades

CUT TO LENGTH | WELDED

Lengths Inclusive from	to	Widths and Thicknesses — List Prices 1-4″ .025	3-8″ .025	3-8″ .032	1-2″ .025	1-2″ .032	5-8″ .025
4′-6″	5′-5″	$1.20	$1.25	$1.30	$1.35	$1.40	$1.50
5′-6″	6′-5″	1.34	1.40	1.46	1.52	1.58	1.68
6′-6″	7′-5″	1.48	1.55	1.62	1.69	1.76	1.86
7′-6″	8′-5″	1.62	1.70	1.78	1.86	1.94	2.04
8′-6″	9′-5″	1.76	1.85	1.94	2.03	2.12	2.22
9′-6″	10′-5″	1.90	2.00	2.10	2.20	2.30	2.40
10′-6″	11′-5″	2.04	2.15	2.26	2.37	2.48	2.58
11′-6″	12′-5″	2.18	2.30	2.42	2.54	2.66	2.76
12′-6″	13′-5″	2.32	2.45	2.58	2.71	2.84	2.94
13′-6″	14′-5″	2.46	2.60	2.74	2.88	3.02	3.12
14′-6″	15′-5″	2.60	2.75	2.90	3.05	3.20	3.30
15′-6″	16′-5″	2.74	2.90	3.06	3.22	3.38	3.48
16′-6″	17′-5″	2.88	3.05	3.22	3.39	3.56	3.66
17′-6″	18′-5″	3.02	3.20	3.38	3.56	3.74	3.84
18′-6″	19′-5″	3.16	3.35	3.54	3.73	3.92	4.02
19′-6″	20′-5″	3.30	3.50	3.70	3.90	4.10	4.20
20′-6″	21′-5″	3.44	3.65	3.86	4.07	4.28	4.38
21′-6″	22′-5″	3.58	3.80	4.02	4.24	4.46	4.56
22′-6″	23′-5″	3.72	3.95	4.18	4.41	4.64	4.74

CUT TO LENGTH | WELDED

Lengths Inclusive from	to	Widths and Thicknesses — List Prices 5-8″ .032	5-8″ .035	3-4″ .035	1″ .035	1 1-4″ .042	1 1-4″ .049
4′-6″	5′-5″	$1.60	$1.65	$1.75	$2.00	$2.45	$2.60
5′-6″	6′-5″	1.80	1.86	1.98	2.28	2.80	2.98
6′-6″	7′-5″	2.00	2.07	2.21	2.56	3.15	3.36
7′-6″	8′-5″	2.20	2.28	2.44	2.84	3.50	3.74
8′-6″	9′-5″	2.40	2.49	2.67	3.12	3.85	4.12
9′-6″	10′-5″	2.60	2.70	2.90	3.40	4.20	4.50
10′-6″	11′-5″	2.80	2.91	3.13	3.68	4.55	4.88
11′-6″	12′-5″	3.00	3.12	3.36	3.96	4.90	5.26
12′-6″	13′-5″	3.20	3.33	3.59	4.24	5.25	5.64
13′-6″	14′-5″	3.40	3.54	3.82	4.52	5.60	6.02
14′-6″	15′-5″	3.60	3.75	4.05	4.80	5.95	6.40
15′-6″	16′-5″	3.80	3.96	4.28	5.08	6.30	6.78
16′-6″	17′-5″	4.00	4.17	4.51	5.36	6.65	7.16
17′-6″	18′-5″	4.20	4.38	4.74	5.64	7.00	7.54
18′-6″	19′-5″	4.40	4.59	4.97	5.92	7.35	7.92
19′-6″	20′-5″	4.60	4.80	5.20	6.20	7.70	8.30
20′-6″	21′-5″	4.80	5.01	5.43	6.48	8.05	8.68
21′-6″	22′-5″	5.00	5.22	5.66	6.76	8.40	9.06
22′-6″	23′-5″	5.20	5.43	5.89	7.04	8.75	9.44

LINEAL LENGTHS

Width	Gauge	Teeth per Inch				Feet per Lb.	Price per Foot	Welding Each
1-4″	.025 or 23 ga.			8	10	47	$0.14	$0.50
3-8″	.025 or 23 ga.			8	10	31	.15	.50
3-8″	.032 or 21 ga.			8	10	24	.16	.50
1-2″	.025 or 23 ga.		6	8	10	23	.17	.50
1-2″	.032 or 21 ga.		6	8	10	18	.18	.50
5-8″	.025 or 23 ga.	4	6	8	10	17	.18	.60
5-8″	.032 or 21 ga.	4	6	8	10	14	.20	.60
5-8″	.035 or 20 ga.	4	6	8	10	12	.21	.60
3-4″	.035 or 20 ga.	4	6	8		11	.23	.60
1″	.035 or 20 ga.	4	6	8		8	.28	.60
1 1-4″	.042 or 19 ga.	3	4			6	.35	.70
1 1-4″	.049 or 18 ga.	3	4			5	.38	.70

"THE BLADES IN THE PLAID BOX"

"LENOX"

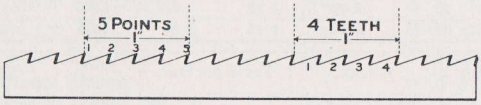
Wood Cutting Band Saw Blades

LIST PRICES—LINEAL LENGTHS

Several processes used in the manufacture of our Metal Cutting Saws have been incorporated in producing the "LENOX" Wood Cutting Band Saw. We can therefore furnish saws which will retain their keen edge longer — give more cuts per saw — cut straighter and last longer than the ordinary band saw.

Width Inches	Gauge	Thickness	Teeth per Inch					Feet per Pound	Per Foot Punched Filed and Set	Welding Each
3-16	25	.020					6	78	$0.13	$0.50
3-16	22	.028			4		6	56	.13	.50
1-4	25	.020					6	59	.13	.50
1-4	22	.028			4		6	42	.13	.50
1-4	21	.032			4	5		36	.13	.50
3-8	25	.020				5		39	.14	.50
3-8	22	.028			4	5		28	.14	.50
3-8	21	.032			4	5		24	.14	.50
1-2	25	.020				5		29	.15	.50
1-2	22	.028	2	3	4	5		21	.15	.50
1-2	21	.032			4	5		18	.15	.50
5-8	22	.028			4			15	.16	.60
5-8	21	.032		3	4			14	.16	.60
3-4	22	.028		3	4			14	.18	.60
3-4	21	.032	2	3	4			12	.18	.60
3-4	20	.035		3				11	.18	.60
1	22	.028			4			10	.22	.70
1	21	.032		3	4			9	.22	.70
1	20	.035	2	3	4			8	.22	.70
1 1-4	20	.035	2	3				6	.26	.70
1 1-2	20	.035	2					5	.32	.80
1 3-4	20	.035	2					4	.38	.80

Deduct 4c per foot on above list for Punched Only Stock.



Note: Wood Band Saw Blades have one more point per inch than teeth per inch, i. e., 4 teeth per inch are 5 points per inch.

General Information

Use 25 gauge in band saws under 8 feet lengths. Heavier gauges for longer lengths.

Equip wheels with good rubber bands to save set of saw. Replace worn guide rollers.

"THE BLADES IN THE PLAID BOX"

"LENOX" Wood Cutting Band Saw Blades

LIST PRICES — Cut to Length — Welded

Lengths Inclusive from	to	Width 3-16″	1-4″	3-8″	1-2″	5-8″
4′-6″	5′-5″	$1.15	$1.15	$1.20	$1.25	$1.40
5′-6″	6′-5″	1.28	1.28	1.34	1.40	1.56
6′-6″	7′-5″	1.41	1.41	1.48	1.55	1.72
7′-6″	8′-5″	1.54	1.54	1.62	1.70	1.88
8′-6″	9′-5″	1.67	1.67	1.76	1.85	2.04
9′-6″	10′-5″	1.80	1.80	1.90	2.00	2.20
10′-6″	11′-5″	1.93	1.93	2.04	2.15	2.36
11′-6″	12′-5″	2.06	2.06	2.18	2.30	2.52
12′-6″	13′-5″	2.19	2.19	2.32	2.45	2.68
13′-6″	14′-5″	2.32	2.32	2.46	2.60	2.84
14′-6″	15′-5″	2.45	2.45	2.60	2.75	3.00
15′-6″	16′-5″	2.58	2.58	2.74	2.90	3.16
16′-6″	17′-5″	2.71	2.71	2.88	3.05	3.32
17′-6″	18′-5″	2.84	2.84	3.02	3.20	3.48
18′-6″	19′-5″	2.97	2.97	3.16	3.35	3.64
19′-6″	20′-5″	3.10	3.10	3.30	3.50	3.80
20′-6″	21′-5″	3.23	3.23	3.44	3.65	3.96
21′-6″	22′-5″	3.36	3.36	3.58	3.80	4.12
22′-6″	23′-5″	3.49	3.49	3.72	3.95	4.28

Lengths Inclusive from	to	Width 3-4″	1″	1 1-4″	1 1-2″	1 3-4″
4′-6″	5′-5″	$1.50	$1.80	$2.00	$2.40	$2.70
5′-6″	6′-5″	1.68	2.02	2.26	2.72	3.08
6′-6″	7′-5″	1.86	2.24	2.52	3.04	3.46
7′-6″	8′-5″	2.04	2.46	2.78	3.36	3.84
8′-6″	9′-5″	2.22	2.68	3.04	3.68	4.22
9′-6″	10′-5″	2.40	2.90	3.30	4.00	4.60
10′-6″	11′-5″	2.58	3.12	3.56	4.32	4.98
11′-6″	12′-5″	2.76	3.34	3.82	4.64	5.36
12′-6″	13′-5″	2.94	3.56	4.08	4.96	5.74
13′-6″	14′-5″	3.12	3.78	4.34	5.28	6.12
14′-6″	15′-5″	3.30	4.00	4.60	5.60	6.50
15′-6″	16′-5″	3.48	4.22	4.86	5.92	6.88
16′-6″	17′-5″	3.66	4.44	5.12	6.24	7.26
17′-6″	18′-5″	3.84	4.66	5.38	6.56	7.64
18′-6″	19′-5″	4.02	4.88	5.64	6.88	8.02
19′-6″	20′-5″	4.20	5.10	5.90	7.20	8.40
20′-6″	21′-5″	4.38	5.32	6.16	7.52	8.78
21′-6″	22′-5″	4.56	5.54	6.42	7.84	9.16
22′-6″	23′-5″	4.74	5.76	6.68	8.16	9.54

See page 34 for gauges available.

Small Bench Type Band Saw Machines

We are specializing in the manufacture of wood band saws for this type of machine both for industrial and homeowner's use.

"LENOX" Wood Cutting Band Saws are made of a particular steel that will readily bend over the small diameter wheels of this equipment without cracking and are welded in such a manner to insure an absence of breakage.

"LENOX"

Standard Blade Lengths Various Metal Cutting Band Saw Machines

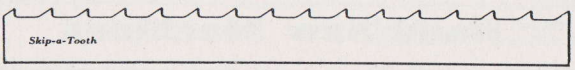
Name of Machine	Length of Blade	Width of Blade
Armstrong-Blum	14′- 8″	5-8″ or 3-4″
Atkins No. 3	15′- 8″	5-8″ or 3-4″
Atkins No. 4	14′- 1″	5-8″ or 3-4″
Avey Milband	14′- 9″	1″
Clark Junior	10′-10″	1-2″ or 5-8″
Clark Compound	15′- 6″	1″
Clark Special	10′-10″	1-2″ to 5-8″
Delta No. 785 Machine — 10″ Wheel	5′- 6″	1-8″ to 3-8″
Delta No. 768 Machine — 10″ Wheel	6′- 2″	1-8″ to 3-8″
Delta 12″ Wheel	6′- 6″	1-8″ to 3-8″
Delta 14″ Wheel	7′- 9 1-2″	1-8″ to 3-4″
Delta 14″ Wheel (HT. Attach)	8′- 9″	1-8″ to 3-4″
Do-All No. J	7′	3-32″ to 1-2″
Do-All No. JD	8′- 7″	3-32″ to 1-2″
Do-All No. M	9′	3-32″ to 1-2″
Do-All No. ML	10′	3-32″ to 1-2″
Do-All No. V16	10′	3-32″ to 1-2″
Do-All No. V26	14′- 9″	3-32″ to 1-2″
Do-All No. V36	13′- 6″	3-32″ to 1-2″
Grob (Conventional Type) NS18	12′	3-32″ to 1″
Grob (Conventional Type) NS24	14′- 4″	3-32″ to 1″
Grob (Conventional Type) NS36	15′	3-32″ to 1″
Grob (Conventional Type) S14	7′- 9″	3-32″ to 1-2″
Grob (Open End Type) OS20 — OSN	140′	3-32″ to 1-4″
Houghton	12′- 6″	5-8″ or 3-4″
Johnson (10″ x 18″)	11′- 5″	3-4″
Kalamazoo (Standard 8″ x 16″)	10′- 5″	3-4″
Kalamazoo (Large 8″ x 24″)	12′- 1″	3-4″
Klemm No. 1	11′- 2″	5-8″ or 3-4″
Klemm No. 2	15′- 8″	5-8″ or 3-4″
Laidlaw CM and CMT	15′- 8″	1″
Laidlaw JM-30 and SM-30	16′	1″
Laidlaw JM and SM	11′	5-8″
Milband	12′-11″	3-4″
Milclark	10′-10″	1-2″ or 5-8″
Napier	12′- 3″	1″
Napier, Jr.	8′- 4″	3-4″
Racine	7′- 8″	1-8″ to 5-8″
Stockbridge or H & R — 6″	12′- 5 1-2″	5-8″
Stockbridge or H & R — 9″	13′	5-8″
Stockbridge or H & R — 12″	15′- 5 1-2″	3-4″
Tannewitz-24″-E	13′- 7″	up to 1 1-4″
Tannewitz-30″-PI-PIE-P3-PH-PHE-P130	17′	up to 1 1-2″
Tannewitz-36″-G3	19′- 6″	up to 2″
Tannewitz-36″-GH-GHE-GI-GIE-GVI	19′- 9″	up to 2″
Tannewitz-42″-RI-RIE-RVI-R3-RH-RHE	22′	up to 2″
Tannewitz Di-Saw 24M	13′- 7″	1-8″ to 1-2″
Thompson	15′- 8″	5-8″ or 3-4″
Thompson Milband	12′-11″	3-4″
Universal Gravity-Feed	9′	1-4″ to 3-4″
Wells No. 5	8′- 2 1-2″	1-2″
Wells No. 8	11′- 7″	3-4″
Wells No. 9	9′- 5″	1-2″
Wells No. 12	13′- 7″	1″
Wells No. 20 (Standard)	16′	1″
Wright	15′- 8″	5-8″ or 3-4″

Standard Blade Lengths Various Wood Cutting Band Saw Machines

Firm Name	Factory No.	Size of Wheel	Length of Band
American Saw Mill Mchy. Co.	Standard	12″	6′ 9″
	Standard	16″	8′ 10″
	Standard	20″	10′ 5″
(Monarch)	72 B & C	20″	11′ 6″
	Economy	27″	14′
	X25	30″	16′ 8″
	Economy	36″	18′ 6″
	X40	36″	21′ 1″
Boice Crane Co.		12″	6′ 5½″
	800	14″	7′ 6″
	2300	14″	8′ 2″
Crescent Machine Company	Old Model	20″	10′ 1″
	Light	20″	10′ 8″
	Heavy	20″	11′ 3″
	Standard	26″	13′ 9″
	Standard	32″	16′ 4″
	Standard	36″	18′ 6″
	Standard	38″	20′ 4″
	Angle	36″	19′ 0″
	Angle	40″	21′ 2″
Delta Mfg. Co.	785	10″	5′ 6″
	768	10″	6′ 2″
		12″	6′ 6″
		14″	7′ 9″
	Ht. Attach.	14″	8′ 9″
Duro Metal Products Co.	3026	9½″	5′
	C3020	12½″	6′ 6″
	A & B 3022	15″	7′ 11″
	B & E 3023	16″	9′ 3″
J. A. Fay & Egan Company	155	30″	15′ 3″
	950	30″	17′ 6″
	192	33″	16′ 3″
	50	36″	18′ 4″
	345	36″	18′ 4″
	950	36″	20′ 6″
	58	42″	21′ 8″
	3	42″	22′ 6″
Heston & Anderson Co.	11	12″	6′ 6″
	1	14″	7′ 2″
	14	14″	8′ 5″
(Dry Ice Model)	50		7′ 7″
Benj. E Jarvis, Inc.		12″	6′ 2″
		16″	8′ 6″
Jones Superior Machine Co.		15″	9′ 3″
		20″	11′ 4″
		30″	16′ 0″
	52	36″	18′ 0″
(Old Style)	53	36″	18′ 0″
(Old Style)	54	36″	18′ 0″
(New Style)	53	36″	19′ 0″
(New Style)	54	36″	19′ 0″
	Production	36″	18′ 11″
		42″	20′ 10″
Oliver Machinery Company	192	18″	9′ 8″
	117	30″	15′ 10″
	117	30″	16′
(Previous to Serial 41899)	217	30″	16′
(After Serial 41899)	16 & 35	36″	19′
	116	36″	19′ 6″
	15 & 115	38″	20′
Walker-Turner Co.		10″	5′ 2″
		12″	6′ 6″
		14″	8′ 5/8″
		16″	9′ 6¾″
J. D. Wallace & Co.		14″	7′ 7″
	16	16″	9′
Yates American Machine Co.		16″	9′ 4″
		20″	11′ 10″
		30″	17′ 2″
		36″	20′
		42″	22′ 8″

"LENOX"

Butcher Band Saw Blades
Hard Edge Teeth
Skip-A-Tooth Type



We have given considerable study and practical experimentation in actually sawing meat to perfect these saws. They have file hard teeth and outlast several times the life of the resharpenable saws. When dull they can be discarded.

LIST PRICES

Cut to Length — Welded

Lengths Inclusive from	to	Width 1-2″	5-8″	3-4″	1″
4′-6″	5′-5″	$1.28	$1.44	$1.56	$1.80
5′-6″	6′-5″	1.42	1.61	1.75	2.04
6′-6″	7′-5″	1.55	1.78	1.94	2.28
7′-6″	8′-5″	1.69	1.94	2.14	2.52
8′-6″	9′-5″	1.82	2.11	2.33	2.76
9′-6″	10′-5″	1.96	2.28	2.52	3.00
10′-6″	11′-5″	2.10	2.45	2.71	3.24
11′-6″	12′-5″	2.23	2.62	2.90	3.48
12′-6″	13′-5″	2.37	2.78	3.10	3.72
13′-6″	14′-5″	2.50	2.95	3.29	3.96
14′-6″	15′-5″	2.64	3.12	3.48	4.20
15′-6″	16′-5″	2.78	3.29	3.67	4.44
16′-6″	17′-5″	2.91	3.46	3.86	4.68
17′-6″	18′-5″	3.05	3.62	4.06	4.92
18′-6″	19′-5″	3.18	3.79	4.25	5.16
19′-6″	20′-5″	3.32	3.96	4.44	5.40
20′-6″	21′-5″	3.46	4.13	4.63	5.64
21′-6″	22′-5″	3.59	4.30	4.82	5.88
22′-6″	23′-5″	3.73	4.46	5.02	6.12

Width	Feet per Pound	Price per Foot	Welding Each
1-2″	25	$0.136	$0.60
5-8″	16	.168	.60
3-4″	12	.192	.60
1″	9	.24	.60

Dry Ice Cutting Band Saws
Hard Edge – Flexible Back

Furnished in the regular Hard Edge Type Flexible Back Blade in following specifications:— ½″ wide, 8 teeth; ⅝″ wide, 6 teeth; 1″ wide, 6 teeth. See page 19 for list prices.

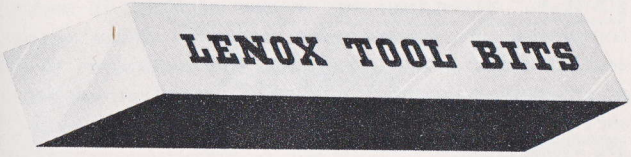
Also furnished in Skip-A-Tooth Hard Edge Type in their full range of widths and teeth. See page 25 for sizes and list prices.

"THE BLADES IN LENOX THE PLAID BOX"

"LENOX"

High Speed Steel Tool Bits
Standard Grade
Hardened and Sand Blasted

DESCRIPTION



MATERIAL. Made from High Speed Steel, their wearing qualities are far above the average tool bit.

HEAT TREATMENT. Special heat treatment is given to "LENOX" Tool Bits that impregnates them with exceptional wear resistant qualities. They cut faster and last longer than the common tool bit.

SHAPED. All sides are square and both ends beveled 20 degrees.

LIST PRICES

Inches Square	Length Overall Inches	No. Pieces Per Pkg.	Price Each
3-16″	2 1-2″	48	$ .20
1-4″	2 1-2″	48	.26
5-16″	2 1-2″	36	.35
3-8″	3″	24	.49
7-16″	3 1-2″	24	.66
1-2″	4″	24	.88
9-16″	4″	18	1.17
5-8″	4 1-2″	4	1.35
3-4″	5″	4	2.08
7-8″	6″	3	3.55
1″	7″	3	5.65

"LENOX"

Precision-Master

TRADE MARK REG

Ground Flat Stock

DESCRIPTION

USAGE. Saves time and insures accuracy in making templates, jigs, gauges, machine parts, shims, fixtures and die work. More economical for toolmakers to use as expensive machining and grinding operations necessary to bring mill stock to accurate measurements are eliminated.

MATERIAL. Electric Furnace Steel having proper carbon and alloy content to permit hardening to 64-66 Rockwell "C." Easy to machine.

PRECISION GROUND. Thickness within plus or minus .001″ of specification, accurately squared on edges and ends. Smooth finish.

STANDARD SIZES. 18″ pieces 1/64″ to 1″ thickness in various widths. Individually packed in grease proof envelopes. Special sizes on application.

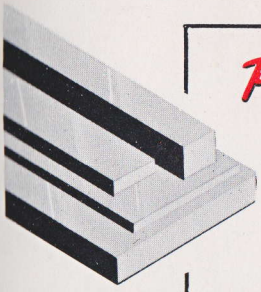
RECOMMENDED HEAT TREATMENT. Either water or oil may be used for hardening. Oil is recommended for intricate sections. Satisfactory hardness will be obtained in either case.

HARDENING TEMPERATURES. Water — 1450 to 1475°F. Oil — 1500 to 1525°F. Heat uniformly. Use high side of temperature range for large sections.

TEMPERING.

Temperature	*Hardness, Rockwell C*
300°F	65-67
350°F	63-65
400°F	61-63
500°F	59-61
600°F	57-59

Time at tempering temperature depends upon size of section. A minimum of 30 minutes, after reaching temperature, is recommended.



Precision-Master
TRADE MARK REG.

GROUND

FLAT STOCK

LIST PRICES

Thickness	Width Inches							
	1-4"	5-16"	3-8"	1-2"	5-8"	3-4"	1"	1 1-4"
1-64"							$ .99	
1-32"				$ .70		$ .70	.70	
3-64"				.64			.64	
1-16"				.46		.52	.58	.75
3-32"				.64		.75	.81	
1-8"				.70		.81	.87	.99
5-32"				.81		.87	.99	
3-16"				.87		1.05	1.10	1.34
7-32"							1.22	
1-4"	$1.16			1.10		1.22	1.34	
5-16"		$1.45		1.40			1.75	
3-8"			$1.75	1.75		1.92	2.04	
1-2"				2.04		2.50	3.09	
5-8"					$2.62		3.38	
3-4"						2.91	3.50	
1"							3.79	

Thickness	Width Inches							
	1 1-2"	2"	2 1-2"	3"	3 1-2"	4"	5"	6"
1-64"	$1.22	$1.45	$1.80	$2.15		$2.91		
1-32"	.93	1.16	1.45	1.75	$2.04	2.33	$3.50	$4.66
3-64"	.87	1.10	1.34	1.63		2.21	3.20	4.37
1-16"	.81	1.05	1.28	1.57	1.86	2.15	2.91	4.08
3-32"	.99	1.16	1.40	1.63	1.92	2.21	3.20	4.37
1-8"	1.05	1.22	1.51	1.75	2.04	2.33	3.32	4.66
5-32"	1.28	1.63	1.86	2.10	2.45	2.68		
3-16"	1.40	1.75	1.98	2.33	2.68	3.03	4.08	5.25
7-32"	1.57	1.86	2.21	2.56		3.50		
1-4"	1.69	2.10	2.56	3.03	3.55	4.08	5.25	6.41
5-16"	2.10	2.50	3.03	3.55		4.66	6.12	7.05
3-8"	2.39	2.80	3.44	4.08		5.25	7.11	7.87
1-2"	3.50	3.85		5.13		6.30	8.75	10.09
5-8"		5.25		7.23		9.04	11.55	13.24
3-4"		5.89		8.05		10.73	13.24	14.46
1"								

LENOX

HACK SAWS

HACKMASTER
MO-SPEED
HIGH SPEED
STANDARD

BAND SAWS

DIEMASTER
REGULAR METAL
SKIP-A-TOOTH
WOOD CUTTING
BUTCHER
DRY ICE

TOOLS

TOOL BITS
GROUND FLAT STOCK

"The Blades in the Plaid Box"